

MUS. COMP. ZOO
HARVARD
JUL 17 1985

B R E V I O R A

Museum of Comparative Zoology

US ISSN 0006-9698

CAMBRIDGE, MASS.

21 JUNE 1985

NUMBER 482

**NEW OR PROBLEMATIC *ANOLIS* FROM COLOMBIA. IV.
ANOLIS ANTIOQUIAE, NEW SPECIES OF THE
ANOLIS EULAEMUS SUBGROUP FROM
WESTERN COLOMBIA.**

ERNEST E. WILLIAMS¹

ABSTRACT. A new species of the *Anolis eulaemus* subgroup of the *A. aequatorialis* species group from the western part of the Departamento Antioquia, Colombia is closer to *A. fitchi* Williams and Duellman of southern Colombia and northern Ecuador than to neighboring *A. ventrimaculatus* Boulenger and *A. eulaemus* Boulenger of the Departments of Valle and Risavaldá.

Three adult female *Anolis* from the Cordillera Occidental of Antioquia, Colombia represent a distinctive new species of the *eulaemus* subgroup of the *Anolis aequatorialis* species group. Other members of this subgroup include *A. eulaemus* Boulenger, *A. ventrimaculatus* Boulenger, *A. gemmosus* O'Shaughnessy, *A. maculigula* Williams and *A. fitchi* Williams and Duellman, all ranging farther to the south in Colombia and Ecuador. Several novelties in the genus *Anolis* have recently been discovered in Antioquia, so it seems appropriate to emphasize the interest of the new material by naming this lizard:

¹Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138.



Figure 1. *Anolis antioquiae*, new species. Female paratype, LACM 72763.

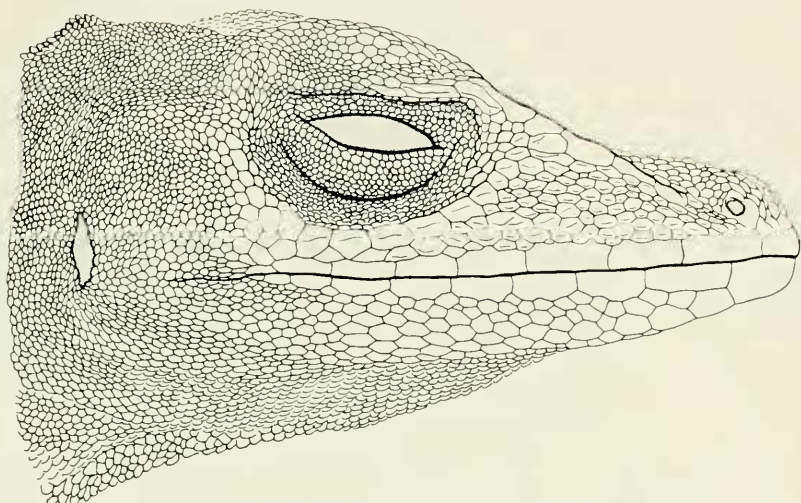


Figure 2. *Anolis antioquiae*, LACM 72763. Lateral view of head.

Anolis antioquiae, new species
(Figs. 1-4)

Type: Inderena 0277, adult female.

Type locality: Along a road paralleling Quebrada Chaparral, Río San Juan drainage, 10 km E of Andes (town), western Antioquia, Colombia, 2200-2300 m. Philip A. Silverstone, Carlos Arturo Escobar and Luis Carlos Acevedo Cuartas coll., July 1971.

Paratypes. *Antioquia:* LACM 72763, adult female, same locality as type. CSJ 310, adult female, Urrao.

Description. *Head.* Head scales minute, anteriorly weakly unimulticarinate, posteriorly pustulose. Sixteen to 19 scales across snout between second canthals. Six to seven scales border rostral posteriorly. Anterior nasal scale separated from rostral by one scale or in contact.

Supraorbital semicircles separated medially by four to five scales. The medial supraocular scales enlarged, wrinkled or keeled, but supraocular disk not or very weakly defined. Three short superciliaries on each side, followed by granules. *Canthus projecting laterally, sharp-edged, slightly overhanging loreal region.* Second and third or third and fourth or fourth and fifth scales longest. Ten to twelve loreal rows.

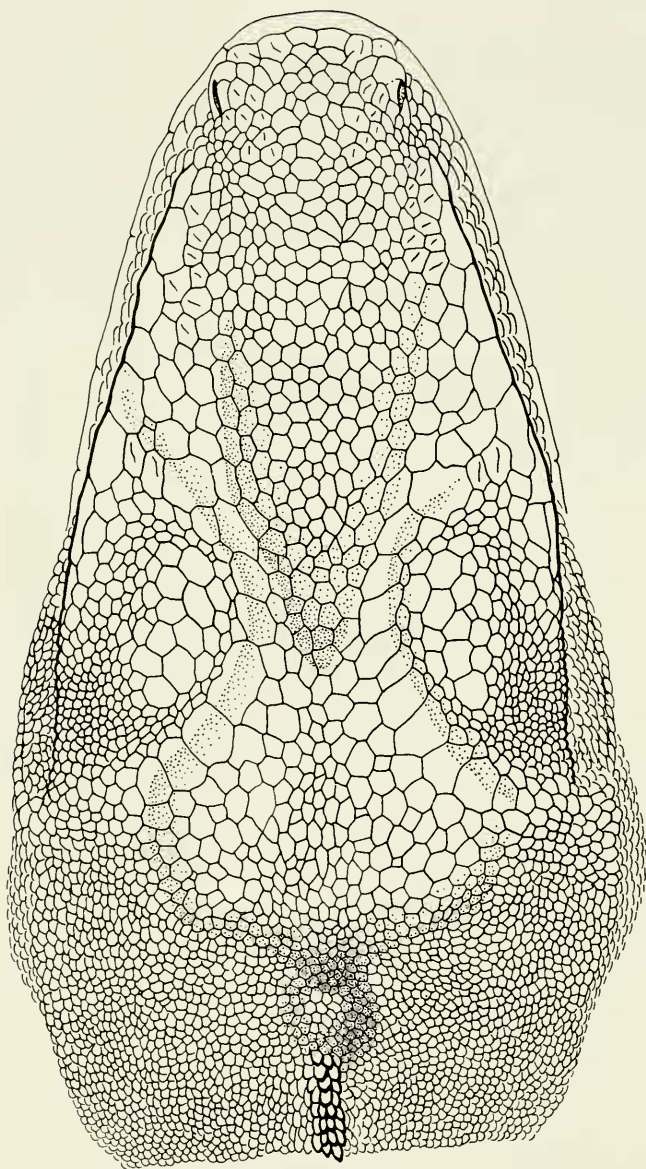


Figure 3. *Anolis antioquiae*, LACM 72763. Dorsal view of head.

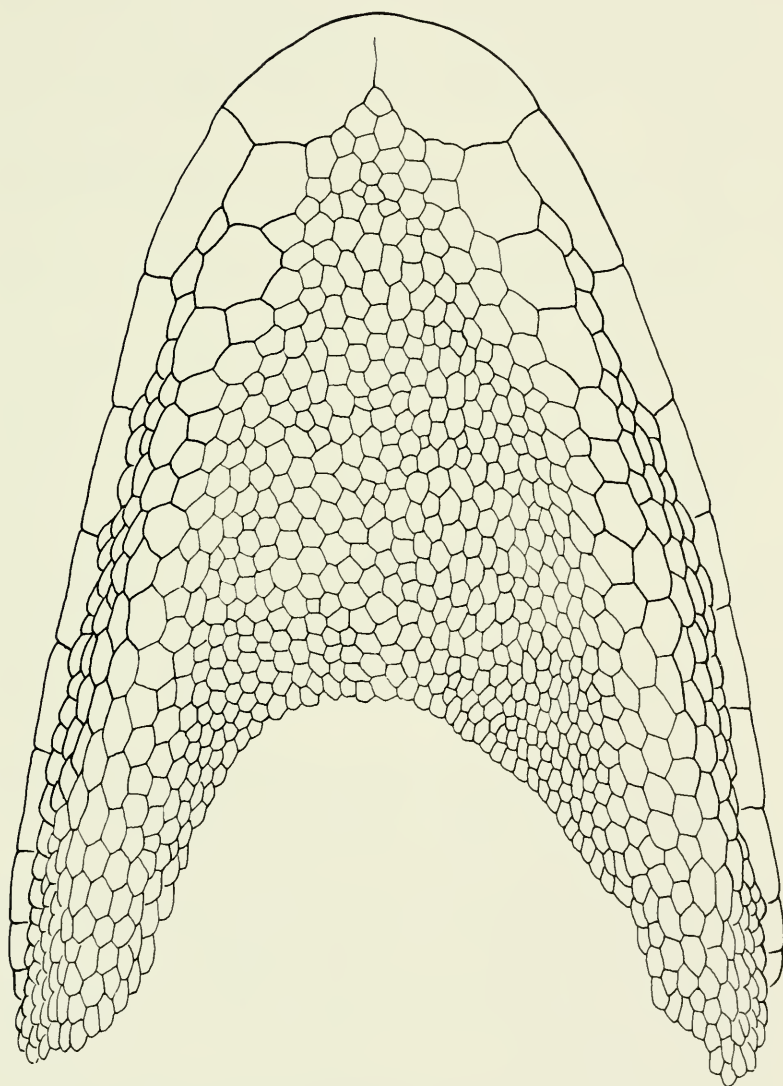


Figure 4. *Anolis antioquiae*, LACM 72763. Ventral view of head.

Temporals and supratemporals granular. An intertemporal double row of enlarged scales hardly indicated. *No interparietal*. Scales in the interparietal area granular posteriorly, grading into parietal area, bounded by oblique lateral ridges which converge on but do not meet a blunt occipital knob, larger scales alongside the supraorbital semicircles. Ear moderate but less than half eye aperture.

Suboculars weakly keeled, narrowly and irregularly in contact with the supralabials. Six to seven supralabials to below the center of the eye.

Mental completely or incompletely divided, each half as wide as deep, indented medially by six to seven small swollen smooth scales between the large smooth sublabials, only the first of which on each side is in contact with the infralabials (on one side of *INDERENA* 0277 the second sublabial also is in contact with the infralabials). Central gular scales smooth or keeled, imbricate, projecting, subequal, becoming rather abruptly larger, laterally adjacent to the infralabials.

Trunk. A central zone of small keeled juxtaposed scales grading into smaller projecting and bluntly or sharply pointed flank scales that are juxtaposed or separated by minute granules. Ventrals larger, smooth, juxtaposed or subimbricate, not in transverse rows.

Dewlap. Moderate (female), extending posteriorly to the level of the axilla. Scales close packed, more or less projecting, smaller than ventrals.

Limbs and digits. Scales on limbs uni- to multicarinate, the largest (on anterior thigh) as large or larger than ventrals, on digits multicarinate. Digital dilations narrow, 21 to 22 lamellae under phalanges ii and iii of fourth toe.

Tail. Compressed, no dorsal crest. Tail scales small, larger below, all keeled except those under the base of tail smooth. Two middorsal rows enlarged.

Size. The snout-vent length of the *INDERENA* type is 72 mm, of CSJ 310 77 mm, and of LACM 72763 74 mm. The tail is broken in all three specimens.

Color (as preserved). Light purplish with brown markings expanding at intervals on the dorsum (Type and LACM 72763) or dark purplish with a dorsal zone brown with a black line on each side (CSJ 310). Throat and belly very weakly spotted on a light grey

Table 1. Comparison of *Anolis antioquiae* and *A. fitchi*.

	<i>antioquiae</i>	<i>fitchi</i>
head scales	minute, uni- and multi-carinate	small, multicarinate, tuberculate or wrinkled
number between second canthals	16-19	11-18
postrostrals	6-7	6-9
superciliaries	the 3 anterior short followed by granules	one anterior elongate followed by one or two shorter ones and granules
canthals	<i>sharply keeled, slightly overhanging loreals</i>	blunt, <i>not</i> overhanging loreals
loreal rows	10-12	8-11
interparietal	none	smaller than ear, separated from semicircles by 3-6 scales
suboculars	narrowly and irregularly in contact with supralabials	separated from supralabials by one row or narrowly in contact
supralabials to center of eye	6-7	8-11
mental	<i>indented</i> medially by 6-7 small scales between <i>large sublabials</i>	<i>in transverse contact</i> with 5-8 scales between infralabials. <i>Sublabials not</i> differentiated.
middorsals and flank scales	a dorsal <i>zone</i> of keeled juxtaposed scales grading into smaller conical flank scales juxtaposed or separated by minute granules	2-4 middorsal rows slightly enlarged, keeled, swollen, subimbricate, lateral granules conical, juxtaposed
ventrals	larger than dorsals, smooth, subimbricate or juxtaposed, <i>not</i> in transverse rows	larger than dorsals, smooth, imbricate or subimbricate, tending to be in transverse rows
lamellae under 4th toe	21-22	21-24

ground (Type) or light purplish laterally smudged medially (CSJ 310). The limbs are very weakly banded, the tail darkish above, lighter below. Dewlap white, blotched and spotted with intense black.

Color in life. P. A. Silverstone has provided color notes for the Type and LACM 72763: "Dorsum green with black median stripe with paired light green spots. Venter brown with white spots. Dewlap red orange with black blotches and yellow border."

Ecology. Silverstone reports the two specimens collected by his party "on ferns at the edge of forest next to pasture."

Comparisons. *Anolis antioquiae* is closest to recently described *Anolis fitchi* Williams and Duellman. In both the female has a blotched dewlap. In both there is a noticeable indication of a small round parietal spine or convexity (Fig. 2) just anterior to the enlarged median nape scales. This small prominence is not evident in other species of the group. Of the other recognized species of the *eulaemus* subgroup, two—*A. ventrimaculatus* and *A. gemmosus*—entirely lack a dewlap in females. In the one female referred to *A. eulaemus* the dewlap is much reduced, apparently with uniformly dark skin. All three examined specimens of *A. antioquiae* lack an interparietal; this scale is always present in *A. fitchi* and in *A. eulaemus*, but sometimes absent in *A. gemmosus* and often so in *A. ventrimaculatus*.

A. antioquiae is unique in one respect: the very sharp canthal ridge projecting above the loreal region, although an apparently trivial character, has not been seen by me in any other species of the group or indeed in any *Anolis*. Within the group the three subequal short superciliaries are unusual. The median angular indentation of the mental by postmental scales contrasts with the straight transverse border seen at the mental gular contact in *A. fitchi*. The conical flank scales often surrounded by granules are again very different from other members of the group.

Although this species is apparently allopatric to—somewhat to the north of—*A. eulaemus* and *A. ventrimaculatus*, and although only females are known (and the female reported as that of *eulaemus* is questionably so referred), there is no question of conspecificity or even of very close relationship. Even with *A. fitchi*, very distant in Napo in Ecuador and Putamayo in Colombia, despite more resemblances, there is no demonstration of close affinity except for position with the same subgroup of a species group.

ACKNOWLEDGMENTS

I am grateful to Jorge Hernandez of INDERENA, John Wright and Robert Bezy of the Los Angeles County Museum (LACM), and Marco A. Serna of the Colegio San Jose, Medellin, Colombia (CSJ) for the loan of specimens. Laszlo Meszoly made the drawings.

LITERATURE CITED

- WILLIAMS, E. E., AND W. E. DUELLMAN. 1984. *Anolis fitchi*, a new species of the *Anolis aequatorialis* group from Ecuador and Colombia, pp. 257-266. In Seigel R. A. et al. (eds.), Vertebrate Ecology and Systematics: A Tribute to Henry Fitch, Lawrence, Kansas.